

## CLAIMS

1. A Composite PTC device having a plurality of  
PTC devices, each having a laminar PTC element  
comprising a polymeric PTC material and a pair of  
5 electrodes mutually separated and deployed on one side of  
the PTC element,  
wherein

the electrodes comprising one electrode from each  
pair of the electrodes on the PTC devices are integrally and  
10 electrically connected and are also connected to one  
terminal, while the electrodes comprising the other  
electrode from each pair of the electrodes on the PTC  
devices are integrally and electrically connected and are  
also connected to other terminal.

15 2. The composite PTC device according to Claim 1  
having two PTC devices, each having the laminar PTC  
element comprising the polymeric PTC material and the pair  
of the electrodes mutually separated and deployed on one  
side of the PTC element, characterized in that  
20 the pair of the electrodes on one of the PTC devices  
are facing the pair of the electrodes on the other PTC  
device,  
each of the terminals is deployed between these  
electrodes, and  
25 the facing electrodes and the terminals between them

are connected electrically.

3. The composite PTC device according to Claim 1 or 2, wherein the laminar PTC element has a cavity section penetrating through in a thickness direction of the PTC element.

4 The composite PTC device according to Claim 3, wherein an end surface of the cavity section is positioned within a peripheral region of the electrode.

5. The composite PTC device any one of Claims 1 to 10 4, which can withstand use under DC 240V or higher and can be used as an automotive safety protection device.

6 The composite PTC device according to Claim 5, which can withstand use at DC 600V.

7. The composite PTC device d according to any 15 one of Claims 1 to 6, wherein current of up to 500 mA flows at DC 12V or 24V under a normal use state.

8. The composite PTC device according to any one of Claims 1 to 7, wherein current flows through each laminar PTC element when entering the composite PTC 20 device from the outside via one terminal and exiting therefrom via the other terminal.